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Sent: Tue 8/14/2012 7:08:50 PM

Subject: Fw: Summary of EPA comments for first SB workshop

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Date: 08/14/2012 12:06 PM

Subject: Summary of EPA comments for first SB workshop

Hi Everyone,

We have a draft of our written comments for the first State Board workshop (due at noon, this Friday, August 17) and they are summarized in a bulleted list below FYI. If others are able to share this type of information from their draft comment letters with the group it would be helpful for everyone.

Summary bullets of EPA written comments

Additional Scientific and Technical Information

X2 is a valid and effective foundation for developing water quality standards that protect aquatic life. Reports that summarize recent technical work on X2 and the low salinity zone are highlighted. Historical Ecology -- information from the Delta Historical Ecology project indicates that X2 was rarely greater than 75 km prior to modifications that simplified channels and eliminated water retaining habitats.

Advances in physical modeling -- identify benefits of 3D models, provide UnTRIM flipbook Highlight work by Winder et al (2011) that suggests we can use the salinity gradient to minimize invasive species invasions by preventing conditions that support invasive species success. BOR and IEP fall adaptive management studies

Managing Uncertainty

The CWA triennial review process and change in point of diversion application are two processes for managing uncertainty related to BDCP changes in the Delta.

Recommend developing a realistic range of future scenarios for precipitation patterns, hydrology, sea level rise, and water demand in California based on impacts to these variables under the current scientific range of climate change predictions. These scenarios should be used to inform Board decisions. The assumption that past climate is a reasonable approximation of the future is no longer valid (NRC 2007, Milly et al. 2008)

Adaptive Management & Monitoring

Changes to the WQCP should include requirements for monitoring that generate data needed to evaluate

of the effectiveness of the standard Develop performance measures for protected uses Identify numeric goals to evaluate the effectiveness of standards

Potential Changes to the Bay-Delta Plan

Develop and evaluate alternatives for water quality standards based on recommendations in the "Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem" and "Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta."

Demonstrate how alternatives considered for potential water quality objectives will halt fish population declines and increase populations of native, commercial, and recreational species

Compare unimpaired flows recommended in the Board's "Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem" to unimpaired flows and fish abundance in the early seventies and the late 1990's. This comparison will inform how well the Board is complying with its anti-degradation policy that requires present conditions to be no worse than they were at the time of CWA passage in the 1970's and will also show how recommended unimpaired flows compare to flows that occurred when fish abundance was increasing in the late 1990's.

Connect percent unimpaired flows to the physical or chemical variables that directly affect beneficial uses and are measurable in the field. For example, salinity or temperature may directly affect the aquatic resource and are readily measurable.

Precision changes to existing X2 standard:

Evaluate the equations used to interpolate X2 to determine if there is a need to improve the equations (potentially minimize bias) used to implement the X2 standard.

The Roe Island trigger appears to not be as effective at producing LSZ conditions similar to what would have occurred in the early 1970's, as originally intended. The Board should evaluate whether or not there is a continued need or usefulness for the Roe Island trigger.

For the spring X2 measures, the Board should evaluate either (a) stating the start of the protective period in terms of some real-time measure of 'first flush,' or (b) stating the start of the protective period as a fixed date, but making that fixed date earlier than February 1 so that it is more likely to reflect the arrival of the first flush.

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I work a part time schedule (M 7:30a - 4:00p, T - F 7:30 - 2:00p)